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Olsen et al.

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- (54) **ANTI-PILFERAGE SYSTEM**
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- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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- (52) **U.S. Cl.** **340/568.1**; 340/568.8; 340/571; 340/572.3; 340/539
- (58) **Field of Search** 340/568.1, 568.8, 340/571, 572.3, 539

(57) **ABSTRACT**

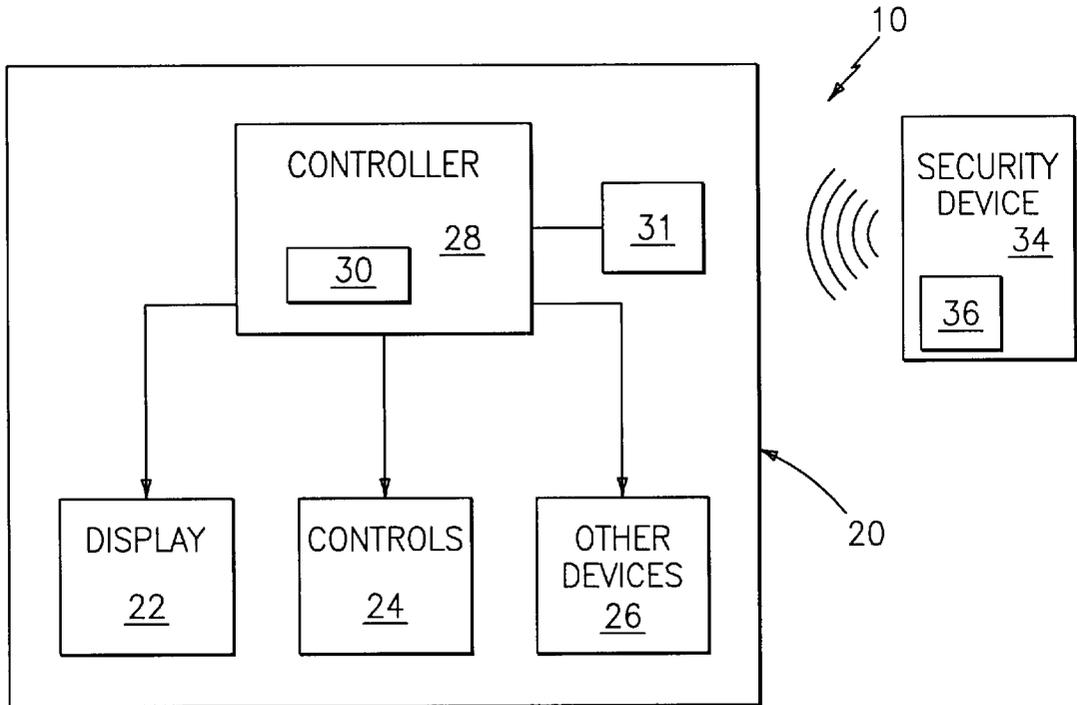
A system for discouraging the unauthorized removal of an electronic device from a designated area is provided. The electronic device includes at least one functional feature (such as a display, speaker, power enabler, controller, etc.) for performing at least one desired function and an enabler, operatively coupled to the functional feature, for enabling the functional feature to perform the at least one desired function. The system further includes a security device that generates a signal, such as an electromagnetic field, so as to cause the enabler to enable the functional feature to perform the at least one desired function. The enabler may comprise a breakable link, such as a fuse. When the electronic device is placed in proximity to the electromagnetic field, the link is broken and the functional feature is enabled. In another preferred embodiment, the electronic device may include a controller operatively coupled to the functional feature for controlling the operability of the functional feature. In this alternate embodiment, the enabler is operatively coupled to the controller, and enables the controller to control the operability of the functional feature. A method for discouraging the unauthorized removal of the electronic device from a designated area is also provided.

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40 Claims, 2 Drawing Sheets



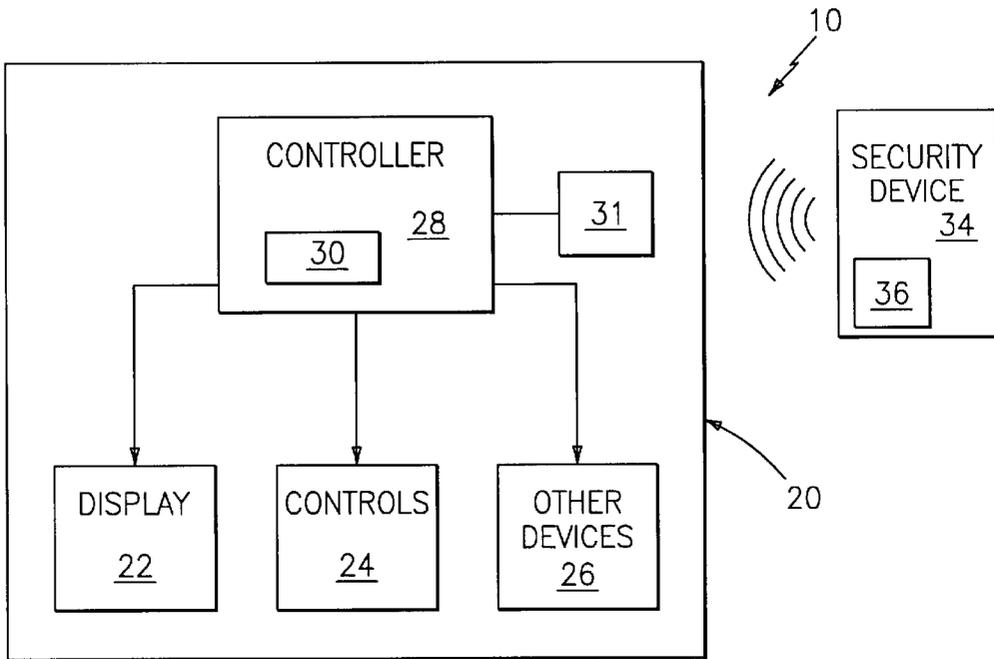


FIG. 1

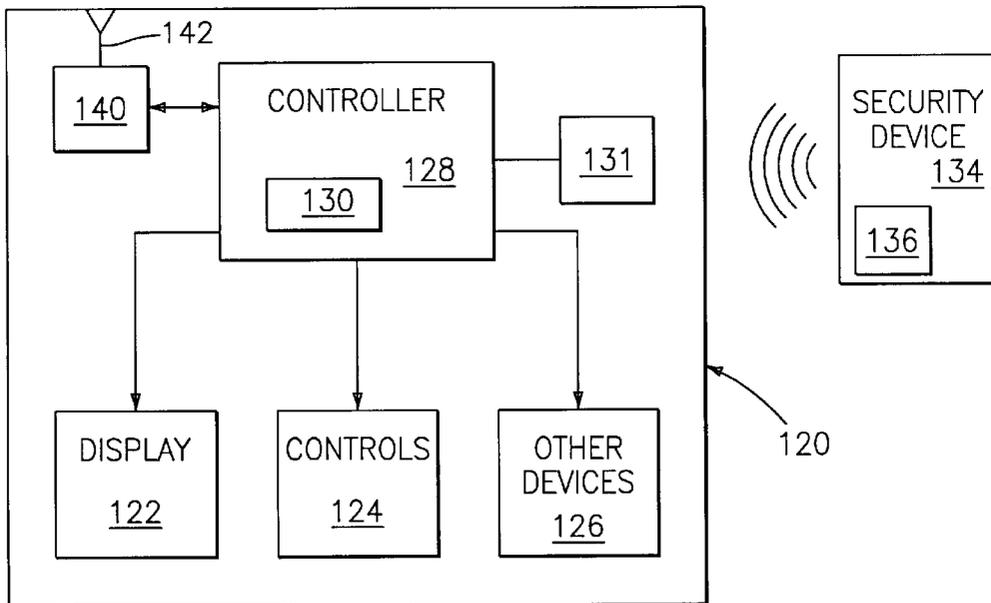


FIG. 2

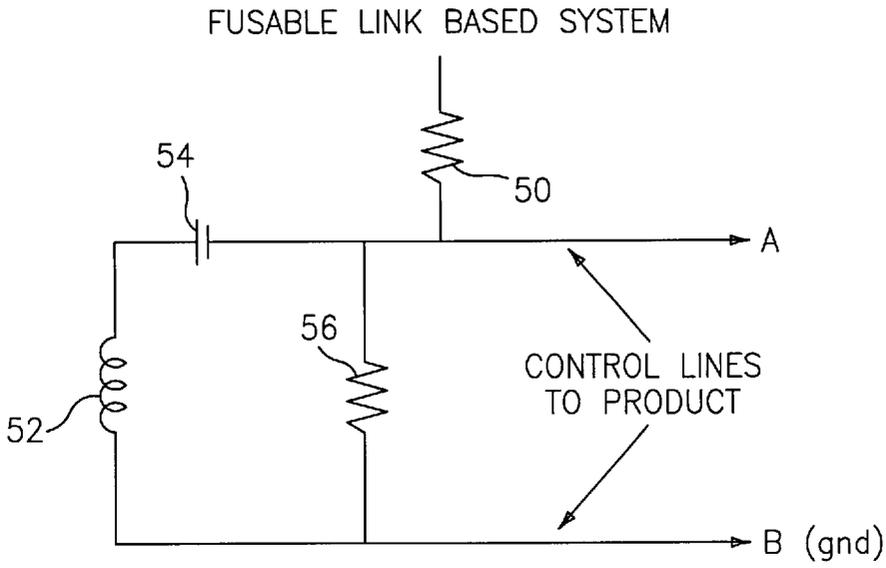


FIG. 3

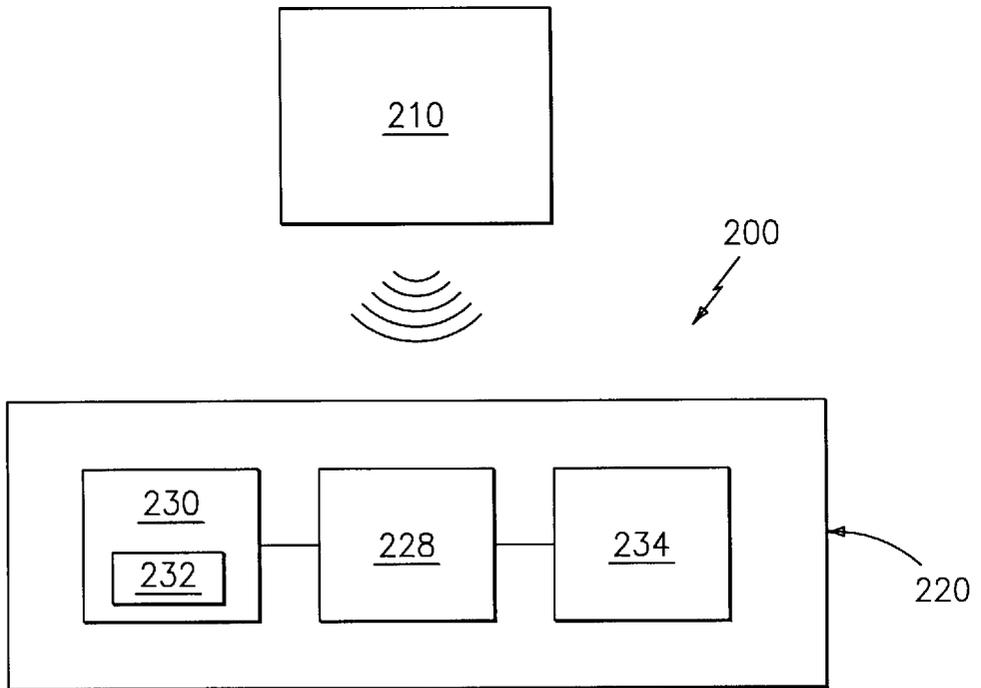


FIG. 4

ANTI-PILFERAGE SYSTEM**BACKGROUND OF THE INVENTION**

The present invention relates generally to anti-pilferage systems, and in particular, to an improved anti-pilferage system for preventing, discouraging and deterring the theft of electronic products from a designated area, such as a store or other area where the electronic products may be kept.

There are numerous existing anti-pilferage systems. One very common system includes the use of a designated "tag" that is affixed to the electronic product or other consumer article. The "tag" preferably includes a tuned resonant circuit. A receiver and separate coils that radiate a particular frequency are located at the exit of the store, and create the necessary magnetic/electric field to detect the "tag" as it enters the field. If someone attempts to improperly remove the consumer article from the store with the "tag" still activated, an alarm will sound. The "tag" is typically deactivated by having the "tag" exposed to a high-radiated field to fuse open a link in the "tag". Once the link in the "tag" is opened, the coils at the exit of the store will no longer detect the "tag".

Other systems to thwart pilferage are also known. Another known example merely places a similar "tag" as that described above on or in connection with the consumer article or electronic product. Such a "tag" is removed by the person at the checkout counter after the purchase has been made. Such "tags", as implied above, may be used for the prevention of clothing as well.

The state of the art anti-pilferage systems are unfortunately less than desirable. For example, if either of the foregoing "tags" is removed from the article while in the store, the article, whether it is clothing or otherwise, can be simply removed from the store with impunity. Still further, many of the "gates" at the exit of the store to detect the existence of such "tags" are low to the ground, or small enough to permit a determined (or tall) individual to avoid having the article enter the field created by the exit gate. Still further, the "tags" could merely be removed from the article by an unscrupulous checkout counter person prior to and/or in lieu of sale of the article. This would require the checkout person to aid the theft, but nonetheless could be done without the employer or other person in authority being able to determine who actually removed the "tag". Lastly, the above-identified systems do not in any way address the concern of theft by the employees themselves.

Accordingly it is desirable to provide an anti-pilferage system that overcomes the aforementioned drawbacks and achieves the aforementioned and below mentioned objectives. In particular, it is desirable to provide a system for discouraging the unauthorized removal of an electronic device from a designated area, and the present invention, as disclosed herein, achieves such objectives.

SUMMARY OF THE INVENTION

Generally speaking, in accordance with the present invention, a system for discouraging the unauthorized removal of an electronic device from a designated area is provided. In a preferred embodiment, the electronic device may include at least one functional feature (such as a display, speaker, power enabler, controller, etc.) for performing at least one desired function, an enabler operatively coupled to the functional feature for first disabling the functional feature from performing the at least one desired function and also for thereafter enabling the functional feature to perform the at least one desired function, and a

security device comprising a generator for generating a signal (which may be in the form of the generation of an electromagnetic field) to the device so as to cause the enabler to enable the functional feature to perform the at least one desired function.

In one embodiment, the enabler may comprise a breakable link, such as a fuse operatively coupled to the functional feature, for initially disabling the functional feature from functioning when the fuse is not broken. When the security device generates the signal, and in this case most preferably the signal is in reality the generation of an electromagnetic field, it causes the breaking of the link, and the functional feature is thereby enabled. That is when the electronic device is placed in proximity to the electromagnetic field, the link is broken and the functional feature is enabled. In the preferred embodiment, the security device need not be in physical or electrical contact with the electronic device.

In another preferred embodiment, the electronic device may include a controller operatively coupled to the functional feature for controlling the operability of the functional feature. In this embodiment, the enabler is operatively coupled to the controller and initially disables the controller from controlling the functional feature and thereafter, as disclosed below, enables the controller to control the operability of the functional feature. Here, for example, the controller may also itself be operable in a plurality of modes, and the enabler may operatively prevent the controller from operating in at least one of the plurality of modes. For example, as long as the enabler prevents the controller from being fully operational, the device may remain in a demonstration mode only. For example, the controller may be programmed to enter both a demonstration mode and an operational mode. However, with the enabler disabling the controller, such as if the enabler is a link that is unbroken as disclosed below, the electronic device may be constructed in such a way that it cannot (a) exit the demonstration mode nor (b) enter the operational mode until the security device generates the signal to the enabler thereby enabling the controller.

In still another embodiment, the enabler may be a smart receiver for receiving the signal from the transmitter of the security device. The smart receiver may include a transmitter for transmitting information to the security device.

In yet another embodiment, the system may include a scanner for transmitting a signal, such as an optical signal containing coded information, and an electronic device, which itself may include a receiver for receiving the signal from the scanner and for processing the coded information contained therein, at least one functional feature for performing at least one desired function, and controller operatively coupled to the receiver and the at least one functional feature, for operatively enabling the functional feature to perform the at least one desired function upon the receipt and decoding of the coded information (by the receiver) in the signal transmitted by the scanner. The controller may control the performance and enablement of the at least one functional feature, and is disabled until the receiver receives and processes the coded information. A method of discouraging the unauthorized removal of such a device is also provided.

In yet another embodiment of the invention, a method of discouraging the unauthorized removal of an electronic device from a designated area is provided. The electronic device comprises the features set forth above, and the method preferably comprises the steps of providing a security device, generating a signal radiating outward from the

security device to the electronic device, and causing the enabler to enable the functional feature, and thus causing the functional feature to perform the at least one desired function. In one preferred method, the enabler comprises a breakable link operatively coupled to the functional feature, and the method comprises the further steps of generating an electromagnetic field, placing the electronic device in proximity to the electromagnetic field, causing the breaking of the link and enabling the functional feature.

In yet another methodology, the electronic device may further comprise a controller operatively coupled to the functional feature for controlling the operability of the functional feature and an enabler operatively coupled to the controller, wherein the method comprises the steps of providing a security device, generating a signal radiating outward from the security device to the electronic device, and causing the enabler to enable the controller and thus causing the controller to control the operability of the functional feature.

In still further embodiments of the present invention an enabler for use in an electronic device that is part of a system for discouraging the unauthorized removal of the electronic device from a designated area is provided. In particular, the preferred enabler prevents a functional feature from performing a desired function and enables the functional features to perform the at least one desired function, wherein the enabler initially disables the functional feature and thereafter enables the functional feature to perform the at least one desired function upon the sufficient entering of an electromagnetic field generated by a security device. In one embodiment, the enabler may comprise a breakable link. In yet another embodiment, the electronic device may comprise a controller operatively coupled to the functional feature for controlling the operability of the functional feature; and the enabler, being operatively coupled to the controller, prevents the operability of the functional feature by disabling and thereafter enabling the controller to control the operability of the functional feature.

In yet still further embodiments, a security device for use in such a system is provided, and further in yet another embodiment, various configurations of the electronic device itself is provided.

Accordingly, it is an object of the present invention to provide an anti-pilferage system for discouraging the unauthorized removal of an electronic device from a designated area.

Yet another object of the present invention is to provide an improved anti-pilferage system that provides for accountability for the enabling of the electronic device.

Still another object of the present invention is to provide an improved anti-pilferage system that permits for identification of the person that enables the electronic device, thereby helping to discourage theft thereof.

Another object of the present invention is to provide an improved anti-pilferage system that discourages the theft of an electronic device by prohibiting a desired operation of the electronic device unless and until the electronic device is enabled by an authorized person.

And yet another object of the present invention is to provide discouragement for in-store employees from assisting in the pilfering of the consumer article.

And still another object of the present invention is to provide an improved anti-pilferage system that provides for improved inventory controls.

Lastly, it should be recognized that the reference to electronic devices should be interpreted in its broadest sense

and be understood to include, but not be limited to timepieces such as watches, PDA's, telephones, video games, computer equipment, and any other electronic device. Such devices may be purchased from a store or stored in a warehouse, the important aspect being understood that the electronic device is constructed to operate in at least one less effective manner unless and until it is appropriate or necessary (i.e. the electronic device is purchased through legitimate channels, for example) to enable or otherwise "activate" the device to operate in the more effective manner (i.e. the device itself operates, or a particular feature, such as the display or speaker, operates).

Still other objects and advantages of the invention will in part be obvious and will in part be apparent from the specification.

The invention accordingly comprises the features of construction, combination of elements and arrangement of parts which will be exemplified in the construction hereinafter set forth, and the scope of the invention will be indicated in the claims.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is block diagram of an anti-pilferage system constructed in accordance with a first embodiment of the present invention;

FIG. 2 is a block diagram of an alternate embodiment of an anti-pilferage system constructed in accordance with the present invention;

FIG. 3 is simplified circuit diagram illustrating a fuse or other link type construction for incorporation into an electronic device to be used in the anti-pilferage system constructed in accordance with the present invention; and

FIG. 4 is block diagram of an anti-pilferage system constructed in accordance with a yet another embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Generally speaking, the present invention recognizes the need to make a portion of the anti-pilferage system an integral part of the electronic device. Preferably, and as discussed in greater detail below, the anti-pilferage system effectively changes, alters or otherwise inhibits the performance characteristics of the electronic device, until such time as it is desired to "deactivate" that which changed, altered or otherwise inhibited the particular performance characteristic. That is, until such time as it is appropriate (i.e. the electronic device is purchased) to enable or "activate" all the features of the electronic device, the electronic device remains less than 100% operational. Such "activation" could be performed by an authorized store clerk or other check-out personnel. Importantly, without the "activation" taking place; the electronic device may remain substantially useless or be severely limited in its performance or function.

Reference is now made to FIG. 1 which illustrates an anti-pilferage system, generally indicated at **10**, constructed in accordance with a first embodiment of the present invention. Generally speaking, system **10** is constructed for discouraging the unauthorized removal of an electronic device, generally indicated at **20**, from a designated area, such as a store or warehouse (not shown). As stated above, electronic device **20** may be any number of devices, such as a watch, PDA, pager, a piece of video or computer equipment such as a camera or monitor or printer, a clock or other timekeeping device, or any other number of devices for the home, office

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or recreation, the important aspect being that the device includes circuitry or software or other features that can be enabled or disabled, preferably from an external security device, as discussed below. Accordingly, by way of example and not limitation, it will be assumed that electronic device **20** is a watch, such as that disclosed in U.S. Pat. No. 5,555,226, the disclosure of which is incorporated by reference as if fully set forth herein.

As illustrated in FIG. 1, electronic device **20** preferably includes at least one functional feature and, most likely, will include more. Examples of such features are a display **22**, controls **24**, such as those features for receiving information from a computer as described in U.S. Pat. No. 5,488,571, the disclosure of which is also incorporated by reference as if fully set forth herein, or any other feature or device, such as a speaker **26** or alarm. The feature itself may be the power supply, thus preventing the electronic device from operating at all until the enabler enables the functional feature or controller as disclosed below. Device **20** preferably also includes a controller, either comprised of hardware, software or a combination of both, generally indicated at **28**, operatively coupled to functional features **22**, **24** and/or **26**. In particular, controller **28** may include a subcontroller **30**, comprised of hardware, software or both, as would be understood in the art, for causing electronic device **20** to perform the at least one desired function, such as to display indicia on display **22**, or sound an alarm on speaker **26** or be able to enter an operational mode from a demonstration mode, which may be controlled by controls **24**, or by controller **28** itself. Additionally, controller **28** may be able to enter a plurality of modes as further disclosed herein. That is, controller **28** may control a number of functions, such as those described in U.S. Pat. No. 5,488,571.

Controller **28** preferably also includes an enabler **31**, operatively coupled to controller **28**, for enabling controller **28** and/or subcontroller **30** to permit performance of the at least one desired function.

Reference is now made to FIG. 3 in connection with the following disclosure for an understanding of a preferred construction of enabler **31**. In particular, a fusible link implementation is provided. If implemented in a microprocessor-based device, such as device **20**, utilizing the disclosed construction provides for the temporary "shorting" of controller **28** and/or subcontroller **30**. Alternatively, enabler **31** may be coupled to controller **28** in a manner so as to cause controller **28** to read a predetermined logic level (i.e. "logic low") on a selected data line. In a non-microprocessor-based product that does not include a controller **28**, the enabler illustrated in FIG. 3 can be placed directly across the feature, such as the display, speaker or power supply, rendering such features or the display itself temporarily inoperable.

As illustrated in FIG. 3, control lines "A" and "B" are operatively coupled across one of the functional features (i.e. a display, a control or a speaker) in a non-microprocessor-based product, and, in a microprocessor-based device, such control lines are coupled across or to controller **28** in such a manner to render controller **28** inoperable, or coupled to controller **28** in such a manner that controller **28** operates in a limited manner until the aforementioned logic level being read thereby is changed (i.e. "logic low" to logic high"). The inventors also recognize that control lines "A" and "B" could also be operatively coupled across one of the functional features (i.e. display **22**, controls **24** or speaker **26**) in the microprocessor-based product as well, and this option should be appreciated as well. In this way, controller **28** can remain in full operation

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and provide for the monitoring of the status of such features (i.e. a logic low on a status line, etc.) when such features **22**, **24** or **26** are being shorted by enabler **31**.

The preferred enabler **31** comprises a pull-up resistor **50** in series with a combination inductor **52** and a capacitor **54**. A link, such as a fuse **56**, is coupled across control lines "A" and "B" which themselves are coupled to controller **28** or the functional feature(s) as disclosed above. In this way, with fuse **56** in place, controller **28** and/or the functional feature (s) may be inoperative (i.e. shorted) until the fuse is "opened" or broken.

In this embodiment therefore, a security device, such as that disclosed below, is provided. Such a security device preferably is designed to generate a signal and in this application, the generation of a signal is intended to include the generation of a relatively high enough electromagnetic field to induce a sufficiently high enough current to "fuse open" the fusible link **56**. For this reason, security device preferably includes an electromagnetic field generator as would be readily known by one skilled in the art. In this way, controller **28** or the functional feature(s) as the case may be, would no longer be shorted and the full operation of the electronic device **20** would be achieved. This action would preferably occur when electronic device **20** is placed in proximity to the electromagnetic field created by security device **34**. It should be understood that security device **34** need not be physically or electrically connected to device **20** in order to "fuse open" fusible link **56**. That is, the necessary current can be induced without any direct physical or electrical contact between security device **34** and device **20**. Mere sufficient proximity between security device **34** and device **20** is all that is necessary. As should be appreciated, the fusible link feature can be used in a broader capacity, for example, to render a particular signal or render a mode in the device inoperable. For example, the fusible link embodiment can be utilized to cause electronic device **20** to remain in a demonstration mode until the electronic device is placed in the proximity to the electromagnetic field, as set forth above. Such would need to incorporate the operation of controller **28** or controls **24**. Likewise, electronic device **20** may have only selected features disabled, as set forth above.

As indicated above, to complete the anti-pilferage system **10** of this first embodiment, security device **34** comprises at least a generator **36** for generating the signal to "fuse open" fuse **56**. For clarity, it should be understood for purposes of the present application, the term "signal" should be understood in its broadest sense, in that references to the security device generating a signal to the electronic device are intended to cover the generation of both an electromagnetic field as disclosed herein or a more conventionally understood signal. In this way, enabler **31** will operatively cause the performance of the at least one desired function, or enable the device to operate fully, from its initially completely or substantially disabled or limited mode as disclosed above. That is, with fuse **56** open, controller **28** and/or controls **24** or other features **22** or **26**, as the case may be, will function.

In the microprocessor-based device, subcontroller **30** and/or controller **28** can cause device **20** to operate in a number of ways. For example, electronic device **20** upon initial manufacture may only be able to operate in a demonstration mode until such time as controller **28** receives the enabling signal (i.e. "fuse open" of fuse **56**) caused by the transmitted signal (i.e. transmission of the necessary electromagnetic field) from security device **34**. Upon receipt of the appropriate information by controller **28**, device **20** can enter the operational mode where all functions of the device are

enabled. In one example, electronic device **20** may not be able to (a) exit a demonstration mode nor (b) enter the operational mode until the enabling signal (i.e. the electromagnetic field created by generator **36**) is received.

Similarly, device **20** may be constructed such that upon manufacture, individual features such as display **22**, controls **24** or other devices **26**, are initially disabled. For example, electronic device **20** will not display indicia on display **22** nor output sound through speaker **26** until the fuse **56** is "opened". In this case, the power supply may be disabled, for example.

In an embodiment where a microprocessor, such as controller **28**, is provided in electronic device **20**, security device **34** may also include a receiver, or a transceiver for both receiving and transmitting information from and to electronic device **20**. In this manner likewise, the device **20** would also have the corresponding receiver and transmitter for bi-directional communication with security device **34**. In this way, a more sophisticated exchange of information between security device **34** and electronic device **20** is achievable. For example, each electronic device **20** may include a unique identifier that can be downloaded to, and can be stored in a central system (not shown), thereby providing information about which particular electronic devices have been sold or "activated" in accordance with the present invention and which particular security device **34** did the "activation".

Consistent therewith, reference is now made to FIG. **2** to highlight the preferred construction to carry out the aforementioned additional aspect that may be incorporated into the present invention. Generally speaking, the present invention may take advantage of the opportunities afforded by what is known in the art as "smart technology". In this alternative embodiment, it should be understood that features **22**, **24** and/or **26**, controller **28**, subcontroller **30**, enabler **31** and security device **34** correspond to and are at least equal in functionality, configuration and construction as corresponding features **122**, **124** and/or **126**, controller **128**, subcontroller **130**, enabler **131** and security device **134**.

In particular, a smart device such as smart receiver **140**, and an antenna **142** coupled thereto, can be embedded directly into electronic device **120**. Such technology is readily available from such companies as Gemplus and Motorola. Smart receiver **140** would also contain its own transceiver (not shown) for communicating in a bi-directional manner with security device **134**. It should likewise be understood that security device **34** need not be physically or electrically connected to device **120** or smart receiver **140**, the only requirement is the necessary proximity to establish the necessary connection. In this manner, electronic device **120** may be enabled in a manner discussed above (i.e. utilizing enabler **131**) and also receive information based on information transmitted via smart receiver **140**. Preferably, smart receiver **140** picks up enough of the radiated field to provide power to its embedded microprocessor, transmitter and receiver. It is also envisioned that the enabler **131**, in this alternative embodiment, may be eliminated in the event that the signal to "activate" controller **128** is a signal received by smart receiver **140** and transmitted to controller **128**. That is, the enabler may be the smart receiver itself.

Reference is now made to FIG. **4** which illustrates an anti-pilferage system, generally indicated at **200**, constructed in accordance with yet another alternative embodiment of the present invention. System **200** may incorporate and work in combination with existing technology, such as

that described in U.S. Pat. Nos. 5,026,975 or 5,311,969, 4,652,732 the disclosures of which are all incorporated by reference as if fully set forth herein.

System **200** is preferably comprised of an optical scanner **210**, which may be located at the cashier stand in the store (not shown), and may be configured to read UPC codes on a product in a manner well understood in the art.

In accordance with the present invention, scanner **210** may (optionally) first read the UPC code on the electronic device, generally indicated at **220**. If the device being read is one in which it is determined that the enabler should be activated, scanner is preferably designed and configured to include operative functionality to further transmit a predetermined signal, for example, in a particular light sequence, although a light sequence is by example and not limitation, to the device **220**. If device **220** is a microprocessor-based device, it would preferably include a controller **228**, similar to controller **28**, and would further include a receiver **230** with a processor, such as an optical processor **232** (as would be known in the art), for receiving, processing and decoding the light sequence (digital signal) transmitted by scanner **210**. In this way, if scanner **210** transmits the proper signal and is received by device **220**, controller **228** would be "activated" in a manner consistent with that disclosed above. That is, device **220** would not become fully operational, for example, unless and until device **220** received the authorized signal from scanner **210**. Such a signal being transmitted could depend on the proper reading of the UPC codes by scanner **210**. The communication between the receiver and the controller would be well understood by one skilled in the art. In such a situation, functional features **234**, which could include all or some, and thereby correspond to features **22**, **24** and **26**, would then be operational. It should be understood that the signal may be an RF signal, and such a signal may be the signal generated by the security device in each embodiment disclosed herein, thereby appreciating the broad configurations and applicability of the present invention.

Likewise, device **220** may be a non-microprocessor-based device. In this case, device may include a monitor or other circuitry that would likewise receive and decode the transmitted signal from scanner **210**. In this way, if the proper signal is transmitted by scanner **210** and received by device **220**, a logic signal could be generated and cause, by way of example and not limitation, a relay to switch from a first position to a second position thereby causing the functional features, such as the corresponding features **234** that correspond to features **22**, **24** and **26** of device **20** to become operational. Similarly, the relay or controller **228** could cause the respective device to operate only in a demonstration mode unless or until the device was properly "activated" by the scanner **210**. It should also be understood that all the features, structure and advantages recognized and disclosed with regard to the embodiments of FIGS. **1** and **2** are likewise achievable with regard to system **200**. Accordingly, it is of the utmost importance to recognize that the generation and transmission of signals in this alternative embodiment (FIG. **4**) can be implemented in those embodiments disclosed above while remaining within the scope of the invention. Hence the "signal generator" must be understood to include both emf, optical and/or electrical signals. It is also well understood that bi-directional communication is achievable, thereby being able to appreciate the aforementioned and below-mentioned objectives. It should be understood that in the above-described example, the signal may be an optical signal. However, it is also within the scope of the skilled artisan that the signal may be electrical, RF or

otherwise so as to cause the enablement of the electronic device **220** in the manner disclosed herein.

It can therefore be seen that an anti-pilferage system constructed in accordance with the present invention will discourage the unauthorized removal of an electronic device from a designated area, such as a store or warehouse. Such an anti-pilferage system provides for accountability for the enabling of the electronic device (i.e. permits for identification of the person that enables the electronic device, thereby helping to discourage theft thereof), as the security device can be identified as the responsibility of a particular person at any time. Moreover, such an anti-pilferage system discourages the theft of an electronic device by prohibiting a desired operation of the electronic device unless and until the electronic device is enabled by an authorized person. Such an anti-pilferage system also discourages in-store employees from assisting in the pilfering of the consumer article while also improving inventory controls therefor.

It will thus be seen that the objects set forth above, among those made apparent from the preceding description, are efficiently attained and, since certain changes may be made in the above constructions without departing from the spirit and scope of the invention, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

It is also to be understood that the following claims are intended to cover all of the generic and specific features of the invention described herein and all statements of the scope of the invention which as a matter of language might fall therebetween.

What we claim is:

1. A system for discouraging the unauthorized removal of an electronic device from a designated area, the system comprising:

- an electronic device comprising:
 - at least one functional feature for performing at least one desired function;
 - an enabler, operatively coupled to the functional feature, for disabling the functional feature from performing the at least one desired function and for enabling the functional feature to perform the at least one desired function, the enabler initially disabling the functional feature; and

- a security device comprising a generator for generating a signal to the device-to permanently prevent the enabler from any further disabling of the functional feature and to thereafter permit the functional feature to perform the at least one desired function;

wherein the enabler is configured so as to no longer be able to disable the functional feature once the security device generates the signal and the signal is received by the enabler;

whereby the enabler cannot cause the functional feature to go from an enabled state to a disabled state once the security device generates the signal and the signal is received by the enabler.

2. The system as claimed in claim **1**, wherein the enabler comprises a breakable link, operatively coupled to the functional feature, for initially disabling the functional feature from functioning; and

- wherein the security device generates an electromagnetic field that causes the breaking of the link thereby enabling the functional feature to function.

3. The system as claimed in claim **2**, wherein the link is operatively coupled across the functional feature so as to initially disable functioning thereof; and

when the electronic device is placed in proximity to the electromagnetic field, the link is broken and the functional feature is enabled.

4. The system as claimed in claim **3**, wherein the link is comprised of a fuse, and wherein the link provides a short across the functional feature;

- wherein when the electronic device is placed in proximity to the electromagnetic field, the short across the functional feature is removed.

5. The system as claimed in claim **1**, wherein the electronic device is a timepiece.

6. The system as claimed in claim **5**, wherein the timepiece is a watch.

7. The system as claimed in claim **1**, wherein the functional feature is a display and wherein the at least one desired function is the display of indicia thereon, and wherein the electronic device cannot display the indicia on the display until the electronic device is placed in proximity to the electromagnetic field and receives the signal from the security device thereby causing the enabler to enable the functional feature.

8. A system for discouraging the unauthorized removal of an electronic device from a designated area, the system comprising:

- an electronic device comprising:
 - at least one functional feature for performing at least one desired function;
 - a controller, operatively coupled to the functional feature, for controlling the operability of the functional feature;
 - an enabler, operatively coupled to the controller, for disabling the controller from controlling the operability of the functional feature and for enabling the controller to control the operability of the functional feature; and

- a security device comprising a generator for generating a signal to the device to permanently prevent the enabler from any further disabling of the controller and to permit the controller to control the operability of the functional feature;

- wherein the enabler is configured so as to no longer be able to disable the controller once the security device generates the signal and the signal is received by the enabler;

- whereby the enabler cannot cause the controller to go from an enabled state to a disabled state once the security device generates the signal and the signal is received by the enabler.

9. The system as claimed in claim **8**, wherein the controller is operable in a plurality of modes, and

- wherein the enabler operatively prevents the controller from operating in at least one of the plurality of modes.

10. The system as claimed in claim **9**, wherein the controller includes a subcontroller for operatively causing the at least one functional feature to perform the at least one desired function.

11. The system as claimed in claim **9**, wherein the controller can cause the electronic device to enter a demonstration mode and an operational mode, and wherein the electronic device cannot (a) exit the demonstration mode nor (b) enter the operational mode until the security device transmits the signal to the device.

12. The system as claimed in claim **8**, wherein the controller cannot operatively cause the functional feature to operate until the enabler enables the controller.

13. The system as claimed in claim **8**, wherein the enabler comprises a breakable link, operatively coupled to the controller, for initially disabling the controller; and

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wherein the security device generates an electromagnetic field that causes the link to break thereby enabling the controller.

14. The system as claimed in claim 13, wherein the link is operatively coupled across the controller so as to initially disable operation thereof; and

when the electronic device is placed in proximity to the electromagnetic field, the link is broken and the controller is enabled.

15. The system as claimed in claim 14, wherein the link is comprised of a fuse, wherein when the electronic device is placed in proximity to the electromagnetic field, the fuse is broken.

16. The system as claimed in claim 8, wherein the enabler is a smart receiver, the smart receiver for receiving the signal generated by the security device.

17. The system as claimed in claims 16, wherein the smart receiver includes a transmitter for transmitting information to the security device.

18. The system as claimed in claim 17, wherein the security device includes a receiver for receiving information transmitted from the electronic device;

wherein the smart receiver and the security device are able to communicate in a bi-directional manner, such that first signals containing information may be transmitted from the security device to the electronic device and second signals containing information may be transmitted from the electronic device to the security device.

19. The system as claimed in claim 8, wherein the enabler is a smart receiver, the smart receiver for receiving the electromagnetic field generated by the security device.

20. The system as claimed in claim 8, wherein the functional feature is a display operatively coupled to the controller, and wherein the at least one desired function is the display of indicia thereon, and wherein the electronic device cannot display the indicia on the display until the electronic device is placed in proximity to the electromagnetic field and receives the signal from the security device thereby causing the enabler to enable the controller.

21. The system as claimed in claim 8, wherein the electronic device is a timepiece.

22. The system as claimed in claim 21, wherein the timepiece is a watch.

23. A method of discouraging the unauthorized removal of an electronic device from a designated area, wherein the electronic device comprises at least one functional feature for performing at least one desired function and an enabler operatively coupled to the functional feature, for disabling the functional feature from performing the at least one desired function and for enabling the functional feature to perform the at least one desired function, the enabler initially disabling the functional feature, wherein the method comprises the steps of:

providing a security device in the designated area; requiring that the electronic device be placed proximate the security device in order for the functional feature to be enabled;

generating a signal radiating outward from the security device to the electronic device;

causing the enabler to enable the functional feature, and thus enabling the functional feature to perform the at least one desired function;

permanently preventing the enabler from any further disabling of the functional feature;

wherein the enabler is configured so as to no longer be able to disable the functional feature once the security device generates the signal and the signal is received by the enabler;

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whereby the enabler cannot cause the functional feature to go from an enabled state to a disabled state once the security device generates the signal and the signal is received by the enabler.

24. The method as claimed in claim 23, wherein the enabler comprises a breakable link operatively coupled to the functional feature, the method comprising the further steps of:

generating a electromagnetic field; and

placing the electronic device in proximity to the electromagnetic field;

causing the breaking of the link; and

enabling the functional feature.

25. The method as claimed in claim 23, including the step of:

providing the enabler within a timepiece.

26. A method of discouraging the unauthorized removal of an electronic device from a designated area, wherein the electronic device comprises at least one functional feature for performing at least one desired function, a controller operatively coupled to the functional feature for controlling the operability of the functional feature, and an enabler operatively coupled to the controller for disabling the controller from controlling the operability of the functional feature and for enabling the controller to control the operability of the functional feature, wherein the method comprises the steps of:

providing a security device in the designated area;

requiring that the electronic device be placed proximate the security device in order for the controller to be enabled;

generating a signal radiating outward from the security device to the electronic device;

causing the enabler to enable the controller and thus enabling the controller to control the operability of the functional feature;

preventing the enabler from any further disabling of the controller;

wherein the enabler is configured so as to no longer be able to disable the controller once the security device generates the signal and the signal is received by the enabler;

whereby the enabler cannot cause the controller to go from an enabled state to a disabled state once the security device generates the signal and the signal is received by the enabler.

27. The method as claimed in claim 26, including the steps of:

providing a controller operable in a plurality of modes; and

operatively preventing the controller from operating in at least one of the plurality of modes.

28. The method as claimed in claim 27, wherein the controller can operate in a demonstration mode and an operational mode, including the steps of:

preventing the electronic device from exiting the demonstration mode;

causing the electronic device to receive the signal from the security device; and

causing the electronic device to enter the operational mode.

29. The method as claimed in claim 26, wherein the enabler comprises a breakable link operatively coupled to the controller, the method comprising the further steps of:

generating a electromagnetic field; and
placing the electronic device in proximity to the electro-
magnetic field;
causing the breaking of the link; and
enabling the controller.

30. The method as claimed in claim 26, wherein the enabler is a smart receiver, the method comprising the steps of:

generating a electromagnetic field; and
placing the electronic device in proximity to the electro-
magnetic field;
causing the smart receiver to communicate with the
controller; and
enabling the controller.

31. The method as claimed in claim 30, the method comprising the steps of:

causing the electronic device to transmit information to
the security device;
causing the security device to transmit information to the
electronic device;

whereby the smart receiver and the security device are
able to communicate in a bi-directional manner, such
that first signals containing information may be trans-
mitted from the security device to the electronic device
and second signals containing information may be
transmitted from the electronic device to the security
device.

32. The method as claimed in claim 26, including the step
of providing the enabler within a timepiece.

33. An enabler for use in an electronic device that is part
of a system for discouraging the unauthorized removal of the
electronic device from a designated area, wherein the elec-
tronic device comprises at least one functional feature for
performing at least one desired function, and the enabler,
being operatively coupled to the functional feature, com-
prising:

a disabling arrangement that prevents the functional fea-
ture from performing the at least one desired function
and that permits, once the disabling arrangement is
disabled, the functional feature to perform the at least
one desired function;

wherein the enabler initially disables the functional fea-
ture and thereafter enables the functional feature to
perform the at least one desired function upon the
receipt of a signal generated by a security device and
further wherein the enabler is configured so that it is
permanently prevented from any further disabling of
the functional feature once the security device gener-
ates the signal and the signal is received by the enabler.

34. The enabler as claimed in claim 33, wherein the
disabling means comprises a breakable link, operatively
coupled to the functional feature, for initially disabling the
functional feature from functioning; and

wherein the enabling means is the breakability of the link.

35. The enabler as claimed in claim 33, wherein the link
is comprised of a fuse, and wherein the link provides a short
across the functional feature;

wherein when the electronic device is placed in proximity
to an electromagnetic field generated by the security
device, the short across the functional feature is
removed.

36. An enabler for use in an electronic device that is part
of a system for discouraging the unauthorized removal of an
electronic device from a designated area, wherein the elec-
tronic device comprises at least one functional feature for

performing at least one desired function, a controller opera-
tively coupled to the functional feature for controlling the
operability of the functional feature; and the enabler, being
operatively coupled to the controller, comprising:

5 an arrangement that prevents the operability of the func-
tional feature and that permits, once the arrangement is
disabled, the controller to control the operability of the
functional feature; and

10 wherein the enabler initially disables the controller from
controlling the operability of the functional feature and
thereafter enables the controller to control the operabil-
ity of the functional feature and further wherein the
enabler is configured so that it is permanently pre-
vented from any further disabling of the controller once
15 the security device generates the signal and the signal
is received by the enabler.

37. The enabler as claimed in claim 36, wherein the means
comprises a smart receiver.

38. A security device for use in a system for discouraging
the unauthorized removal of the electronic device from a
designated area, wherein the electronic device comprises at
least one functional feature for performing at least one
desired function, an enabler operatively coupled to the
functional feature for causing the disabling of the functional
feature from performing the at least one desired function and
for enabling the functional feature to perform the at least one
desired function wherein the enabler is configured so as to
no longer be able to disable the functional feature once the
security device generates the signal and the signal is
received by the enabler, the security device comprising:

a generator for generating an electromagnetic field for
causing the enabler to be unable to further disable the
functional feature and to thereafter permit the func-
tional feature to perform the at least one desired func-
tion.

39. An electronic device for use in a system for discour-
aging the unauthorized removal of the electronic device
from a designated area, the system having at least a security
device comprising a generator for generating a signal to the
device, the device comprising:

at least one functional feature for performing at least one
desired function;

a controller, operatively coupled to the functional feature,
and for controlling the operability of the functional
feature; and

an enabler, operatively coupled to the controller, for
disabling the controller from controlling the operability
of the functional feature and for enabling the controller
to control the operability of the functional feature,
wherein the enabler is configured so as to no longer be
able to disable the controller once the security device
generates the signal and the signal is received by the
enabler;

55 wherein upon the generation of the signal by the security
device and the causing of the electronic device to be
placed in close proximity to the security device, the
enabler enables the controller to control the operability
of the functional feature and the enabler is no longer
able to disable the controller.

40. The electronic device as claimed in claim 39, wherein
the enabler comprises a breakable link, and

wherein the signal generated by the security device is an
electromagnetic field that causes the breaking of the
link thereby enabling the functional feature to function.